RECORD OF DECISION

As the Deputy Assistant Chief of Staff for Installation Management, I have reviewed the Final Pinon Canyon Maneuver Site (PCMS) Transformation Environmental Impact Statement (EIS). The EIS adequately assesses the environmental impacts of implementing Army transformation programs at the PCMS and related alternatives. The EIS is hereby incorporated by reference. As indicated in this Record of Decision (ROD), the Army will proceed with its selected action of implementing the Preferred alternative.

1.0 Background

The U.S. Army (Army) is currently undergoing transformational activities across a full spectrum of military operations to respond more rapidly to enemy threats. These changes will affect most, if not all, aspects of the Army's doctrine, training, leader development, organizations, installations, materiel acquisition and fielding, and Soldiers. The Army proposes to construct facilities and increase training at the PCMS in support of the realignment and transformation of Fort Carson. Changes are expected to occur between 2007 and 2011.

The Army prepared the EIS in compliance with its responsibilities under the National Environmental Policy Act (NEPA) to assess the direct, indirect, and cumulative environmental and socioeconomic effects of implementing three specific Army transformational programs at the PCMS: 1) the Base Realignment and Closure (BRAC) Program (BRAC 2005), authorized under the Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended; 2) Global Defense Posture Realignment (GDPR), formerly known as the Integrated Global Presence and Basing Strategy (IGPBS); and 3) the Army Modular Force (AMF) initiative. Under these programs, the PCMS must support training for additional Active Component (AC) troops stationed at Fort Carson and support additional training for Reserve Component (RC) units. Implementing these requirements will involve constructing new facilities in the Cantonment to support longer-duration training exercises, constructing new facilities in the training areas, and increasing the use of the training areas at the PCMS.

2.0 Preferred Alternative

Under the Preferred Alternative evaluated in the EIS, the Army will: 1) increase use of the PCMS training areas to provide training for realigned AC units and additional RC units assigned to, or otherwise under the control of Fort Carson; 2) construct facilities in the Cantonment to support longer-duration training rotations; and 3) construct training facilities in the training areas. The Preferred Alternative is the Army's selected action.

The development of the training component of the Preferred Alternative is based on training resource requirements as prescribed by Army Training Circulars (TC) 25-1, "Training Land," and 25-8, "Training Ranges." Training and maneuver activities will be similar to the types of activities that presently occur on the PCMS. The increased training requirements of additional AC and RC units, however, will result in increased frequency of use of the training areas. It is likely that more training rotations will occur and that the duration of training exercises will increase to support additional AC Soldiers and new training requirements (which also occur under the No Action Alternative). The PCMS also may be responsible for providing training for thousands of RC troops. The Army will continue to implement land and environmental management programs and standard practices to maintain its training lands for continued use and coordinate and execute its training exercises through its directorates as described in Sections 2.3.4.3, 2.3.4.4, and 2.3.4.5 of the EIS.

Under the Preferred Alternative, the Army will construct several support facilities in the cantonment area at the PCMS to support longer-duration training rotations. These will include a brigade support complex, medical facilities, storage facilities, minimum Soldier support functions, a vehicle maintenance facility, motor pools, upgraded roads, and expanded or upgraded utilities. Similar to existing facilities at the PCMS, the Cantonment facilities constructed under the Preferred Alternative will be austere. No units will be permanently stationed at the PCMS; therefore, the PCMS will not support long-term Soldier care and will have no role in providing permanent support for dependents, civilian contractors, or personnel other than a small custodial staff.

Outside the Cantonment, the Army will construct and operate a live hand grenade range, ammunition holding area, protective equipment training facility, and communication facilities, and upgrade an existing small-arms range. These projects are necessary to allow the PCMS to certify Soldiers for operational deployments. The projects proposed for construction in the training areas involve little ground disturbance during either construction or operation.

The impact of the additional personnel to be stationed at Fort Carson on Fort Carson itself is the difference in the proposed actions for the two sites, the difference in the affected environment, and convenience to the public made the preparation of two separate EISs a logical choice.

3.0 Purpose of and Need for the Selected Action

The purpose of the selected action is to implement three major Army programs: 1) BRAC, 2) GDPR, formerly known as IGPBS; and 3) the AMF. The need for the selected action is to advance the goals of transformation, improve military capabilities, and enhance military value. Transformation goals were a central component of the BRAC 2005 process. The BRAC Commission noted that this round of BRAC focused not just on reducing costs and closing unneeded military installations but also on "facilitating the transformation of our armed forces to meet the challenges of the new century" (Defense BRAC Commission, 2005). The Preferred Alternative evaluated in the EIS is the Army's selected action to comply with the law and achieve the objectives for which Congress established the BRAC process.

4.0 Alternatives to the Selected Action

The EIS evaluated two alternatives in detail: the Preferred Alternative and the No Action Alternative. The selected action is implementation of the Preferred Alternative, which is described in Section 2.0, above.

The No Action Alternative was included in the EIS in accordance with the Council on Environmental Quality (CEQ) and Army NEPA-implementing regulations. Under the No Action alternative, the changes required by BRAC 2005, GDPR, and AMF would not be implemented at the PCMS. Force structure, assigned personnel, and equipment would be as they existed prior to the development of these programs. This alternative is not feasible because the Army and Congress have determined realignment is necessary, and troops will need to train at the PCMS. The BRAC 2005 realignment at Fort Carson has been directed by Congress and must occur. The No Action alternative provided a benchmark to compare the magnitude of the environmental effects of the selected action.

The Army considered other alternatives to balance training requirements and land availability. These alternatives included training troops at other locales or varying training schedules to account for operational deployments. These alternatives were determined not to be reasonable because they either were not feasible or unreasonably restricted the Army's ability to react to changing conditions. The

Army also considered land acquisition but this alternative was dismissed from detailed evaluation in the EIS. Development of the proposed action or alternatives for land acquisition would not be responsive to BRAC realignment requirements according to BRAC 2005 decisions and timelines. The Army is in the process of considering land acquisition to extend Army training capabilities at PCMS and is committed to preparing an EIS to support any future decision-making on proposed expansion. Therefore, only the Preferred Alternative and the No Action Alternative were carried forward for detailed environmental analyses in the EIS.

Alternatives to restationing troops to Fort Carson were not considered in the EIS. Under the Base Closure and Realignment Act of 1990, decisions regarding restationing troops to alternate installations are not revisited in NEPA documents. The Army also prepared a Programmatic EIS for Army Transformation in 2002 to address environmental impacts of transformational activities on a national level. The EIS tiers from that analysis and provides site-specific analysis of impacts at the PCMS.

5.0 Environmental Consequences

The EIS identified direct, indirect, and cumulative impacts of implementing the selected action in the following resource areas: land use; air quality; noise; geology and soils; water resources; biological resources; cultural resources; socioeconomics, including environmental justice; transportation; utilities; and hazardous and toxic substances. These impacts are described below. With implementation of mitigation and best management practices (BMPs) (as described in Section 6.0), there would be no significant environmental impacts associated with the selected action.

Land Use, Plans, and Policies. Increased training could degrade training lands and affect the long-term availability of training lands for military use. Increased training activities will reduce the availability of training areas at the installation for hunting. High-noise contours extend outside the installation boundaries, and these areas are incompatible with residential and some recreational uses. The selected action does not conflict with local land use plans and does not change land uses outside of the PCMS boundary.

Air Quality. Operations emissions will be generated by use of additional combustion equipment (such as heating units) and additional mobile sources. Increased traffic on dirt roads and trails from the additional training activities at the PCMS will affect air quality. Construction activities could result in short-term impacts to air quality because of wind-blown dust created by construction equipment, exhaust emissions from construction equipment, and the increased number of vehicle trips by construction workers. Neither the short-term nor the long-term increase in air emissions will result in any violations of regional air quality standards.

Noise. Training activities at the proposed live hand grenade range will result in high noise levels when the range is in use. Sensitive noise receptors, such as residences, parks, or schools, are not present in the vicinity of the noise-impacted areas outside the PCMS (that is, within the modeled noise contours), so sensitive receptors will not be affected. Noise increases outside the installation boundaries from training activities could preclude locating new residences or other sensitive receptors in these areas in the future. Increased noise levels from building construction and road maintenance will be temporary and will occur within the PCMS boundary.

Geology and Soils. Increased training activities, such as tank defilades, tank traps, neutral pivot turns, repeated vehicle passes, and bivouacking may cause direct impacts to soils such as compaction and ruts. Training on wet soil could increase rutting and destroy vegetative cover. In addition, increased wind and water erosion could occur in areas where vegetative cover is affected. Ground disturbance

associated with construction and demolition projects and operation of the live hand grenade range could result in erosion and sedimentation.

Water Resources. Increased training activities, including mechanized and live-fire maneuvers, crossing dry drainages, and training in wet conditions, could result in increased erosion and subsequent sedimentation of surface waters. Increased use and storage of fuels and solvents during training increases the chances for accidental spills and releases into the environment that could adversely affect surface water or groundwater resources. Personnel and equipment could be affected by floodwaters when training in flood-prone areas, especially during flash flooding. Ground disturbance from construction and demolition activities could result in erosion or sediment transport to surface waters. Spills of fuels, solvents, or other hazardous materials used during construction could adversely affect water resources. The Army will comply with state and federal laws in siting and constructing facilities and will follow the requirements of Executive Order 11988, Floodplain Management.

Biological Resources. Mechanized vehicles and small arms live-fire activities could result in vegetation loss; soil disturbance; disturbance to migratory birds, raptors, other wildlife, and habitat; and a potential increase in noxious weed infestation. Dismounted military training could flush or startle mammals, ground-nesting birds, and reptiles. Accidental wildfires could result from mechanized military training and live-fire activities. Monitoring conducted for the past 20 years at the PCMS indicates that military training has not affected wildlife populations at the installation and that wildlife have generally adapted to activities at the PCMS.

Construction activities in the Cantonment and training areas will cause temporary ground disturbance and result in permanent loss of small areas of native vegetation. Construction will also result in direct, permanent loss of a small area of habitat that will be converted to impervious surface. Direct and indirect impacts from habitat disruption and wildlife disturbance will occur during construction. Land in the cantonment area, however, is currently disturbed and available habitat is primarily developed or landscaped.

The only federally listed species known to use or inhabit the PCMS is the bald eagle (*Haliaeetus leucocephalus*), which is a late fall-through-winter (late October through late February) resident and migrant. Bald eagles are sensitive to human disturbance, including military training. Fewer wintering bald eagles have been found in areas with high human activity compared to areas with moderate human activity. Because bald eagles generally avoid areas of active military training, they are not adversely affected by the current or proposed activities at the PCMS. Following the completion of the EIS, the U.S. Fish and Wildlife Service formally removed the Bald Eagle from the endangered species list on July 9, 2007.

Cultural Resources. Increased training increases the possibility of adverse effects and inadvertent impact to historical and archaeological sites. Construction under the selected action could also result in inadvertent impact to previously unidentified archaeological sites.

Socioeconomics. Minor temporary economic benefits associated with construction expenditures and employment will occur in the region of influence (ROI). No adverse impacts to any community, including low-income and minority populations, are anticipated.

Transportation. Increased military convoy traffic will occur on regional roadways from training deployments to the PCMS. Some of the increased traffic will be on regional roadways already operating at or near capacity. During construction, there will be a temporary increase in truck traffic on regional roadways. Increased frequencies of rail shipments up to 100 days per year are anticipated.

Utilities. The selected action includes implementation of utility upgrades that will ensure adequate potable water, electricity, and natural gas supplies, and adequate wastewater treatment and communication systems. With increased numbers of Soldiers at PCMS for longer periods of time, the potable water supply and wastewater systems may at times be inadequate.

Hazardous and Toxic Substances. Increased training activities will result in an increase in the use and storage of hazardous materials, specifically fuels, batteries, lubricants, and pesticides. Increased training will lead to increased use and storage of ammunition in the range areas and could result in an increase of lead at the small-arms, live-fire ranges. The potential exists that lead-contaminated soils will need to be remediated if ranges are closed in the future. Additionally, live hand grenades will be used on the proposed live hand grenade range. Implementation of the selected action will result in an increase in the use and storage of petroleum-based products and will increase generation of medical waste from one new medical facility and storage of hazardous material at one new hazardous material pharmacy.

Cumulative Effects. In accordance with CEQ regulations implementing NEPA, the EIS evaluated the cumulative effects of relevant past, present, and reasonably foreseeable future actions, both at the PCMS and in the surrounding community. This included coordination with surrounding municipalities and counties, state agencies, and Department of Defense installations. Cumulative effects were assessed by resource areas (air quality, cultural resources, water resources, biological resources, and transportation) and discussed in Section 3.13 of the EIS. It was determined that no other planned projects are present in the area that will result in incremental impacts when combined with the impacts of the selected action. Cumulative environmental impacts, therefore, will not occur.

6.0 Mitigation

The selected action incorporates design features, BMPs, and standard construction practices; existing management plans and programs; and compliance with federal laws that support the sustainability of the Army's military mission at the PCMS and mitigate the majority of the adverse impacts. The Army will continue to implement existing management plans, as periodically revised and updated, including the Integrated Natural Resource Management Plan (DECAM, 2002a); Integrated Cultural Resources Management Plan (DECAM, 2002b); Installation Pest Management Plan (DECAM, 2004j); Fugitive Dust Control Plan (DECAM, 2004a); and the Prescribed Fire Plan (DECAM, 2006d). Implementation of training activities is dependent on a number of factors, such as troop deployment and climate, and is defined as a process-driven approach that responds to those needs. Specific mitigation that will be followed is dependent on the training activities that occur in a given training-year calendar. The Army will follow the training development outlined in Sections 2.2.4.3, 2.2.4.5, and 2.3.4.4 of the EIS to monitor and mitigate training impacts in a coordinated manner. The types of mitigations that are included in that monitoring process are presented herein. The construction component of the selected action is well-defined, and impacts and mitigation, therefore, are also well-defined and presented herein.

The following resource-area mitigation measures are deemed appropriate and will be included in the implementation of the selected action. All practicable or reasonable means to avoid or minimize environmental harm resulting from the selected action have been adopted. Before beginning facilities construction or training, the Garrison Commander will develop and implement procedures, consistent with Appendix C of Title 32 of the Code of Federal Regulations (CFR), Part 651 (32 CFR 651) (Mitigation and Monitoring), for mitigation measures outlined below.

Land Use, Plans, and Policies. The Army will continue to use its land management and environmental programs to provide for sustainable land management and to follow Army Regulation (AR) 200-1, "Environmental Quality: Environmental Protection and Enhancement" and the Installation Environmental Noise Management Plan to monitor noise. The Integrated Training Area Management (ITAM) program will continue to monitor training activities, institute projects to minimize training damage, and educate Soldiers to limit damage on training lands. The Army will continue to consider both training needs and necessary sustainable measures to establish the balance between the two that maintains lands suitable for training while maximizing the achievement of the training mission.

Air Quality. No mitigation will be implemented because emissions from the increase in training will not exceed threshold values. Prescribed burning will continue to follow the Colorado Air Quality Control Commission's Regulation No. 9 and the annual Prescribed Burn Plan. Disturbed areas over 25 acres or areas that have been disturbed 6 months or longer are subject to site-specific state permits, which implement BMPs. Visibility impacts from construction will not exceed thresholds. No mitigation will be implemented for operational air emissions because new facilities at the PCMS will not alter the PCMS's classification as a minor source. Operation of new stationary sources will not exceed regulatory thresholds; therefore, operation of the proposed facilities will not require permitting pursuant to Prevention of Significant Deterioration regulations.

Noise. Increased convoy movements will not result in a perceptible increased traffic noise, and no mitigation will be implemented. Noise from construction will be temporary and no mitigation will be implemented because construction will not occur outside the installation. No known noise-sensitive receptors (for example, residences and schools) are located in the noise-affected areas outside the PCMS boundaries and therefore, no mitigation will be implemented. The Army will follow AR 200-1 and the Installation Environmental Noise Management Plan to continue to monitor noise.

Geology and Soils. The Army will continue to implement erosion control projects, BMPs, maneuver damage repair, and reclamation projects for areas damaged by training activities. The Army will continue to implement and adhere to the provisions of major plans, permits, and regulations to avoid and reduce the effects of erosion and sedimentation on the PCMS, including the Maneuver Damage Control Program, Deferment Program, and Reclamation Planning (Fort Carson, 2004); Integrated Natural Resource Management Plan (DECAM, 2002a); Fugitive Dust Control Plan (DECAM, 2004a); and the Clean Water Act Section 404 Regional Permit No. 2002-00707 (USACE, 2002b). In addition, the Army will implement erosion control projects that include grading of existing roads to ensure proper drainage; installation and maintenance of rock checkdams, waterbars, and hardened (bed of rock) crossings in existing drainages at intersections with established dirt roads; maintenance of erosion control devices, including removal of sediment behind erosion control dams; bank-sloping to reclaim incised erosion courses; and installation and maintenance of diversion berms. If monitoring shows that installed erosion control features are insufficient to mitigate adverse impacts, additional erosion control features (as approved by the Clean Water Act Section 404 Permit) will be implemented. Existing programs and regulations will be implemented to minimize the potential for soil erosion during construction and demolition activities. The Army will minimize areas of disturbance during construction, and landscaping and reseeding will follow applicable standards for the Cantonment and the training areas.

Water Resources. The Army will implement erosion control measures as described above for geology and soils to reduce the turbidity or sedimentation impacts to water resources from increased erosion. For each construction project greater than one acre, the Army will develop and implement a stormwater pollution prevention plan and submit a notice of intent to be covered under a Clean Water

Act stormwater construction general permit. The Army will continue to implement the integrated watershed management approach of the Watershed Management Team. The Army will modify and continue to repair training land damage and stabilize areas from erosion, and continue to implement all applicable hazards management plans to address leaks or spills of hazardous materials. Training procedures will continue to be implemented that direct troops to relocate from flood-prone areas when conditions are favorable for sudden storms and flash flooding. Additionally, the Army will continue to implement existing BMPs, follow permitting requirements, and adhere to the water resources management program.

Applicable hazards management plans will be implemented to address leaks or spills of hazardous materials. The Army will develop and implement a Spill Prevention Control and Countermeasures (SPCC) Plan to address potential adverse effects of spills or leaks of hazardous materials. Vehicle and equipment fueling and maintenance will be restricted to approved areas unless emergency field maintenance is required. If field maintenance is required, appropriate control and containment measures will be implemented to prevent accidental contamination of surface water. The Army will require that all handling and storage of hazardous and toxic substances at the PCMS be done in accordance with established procedures and policies.

A Stormwater Pollution Prevention Plan for each construction project greater than one acre will be developed and implemented to avoid or minimize the potential for impacts attributable to stormwater runoff during construction. The Army will implement dewatering, if necessary, in accordance with the requirements of the Clean Water Act. New facilities will be located in the training areas outside of known flood-prone areas, including areas immediately adjacent to arroyos. The Army will continue to repair training land damage and stabilize areas against erosion.

Biological Resources. For training impacts to vegetation, wildlife, and sensitive species, the Army will continue prescribed burning to create buffer areas to provide additional protection from wildfires, continue weed prevention and control, and will avoid nesting birds by restricting mowing of road shoulders and prescribed burns to the extent possible during the nesting season. Power lines will continue to be surveyed to minimize bird electrocutions. The Army will continue its practice of identifying golden eagle (*Aquila chrysaetos*) nest sites annually, establishing 1,640-foot (500-meter) buffers around each nest site, and restricting training in buffer zones from April through June. Areas of vegetation disturbed by construction activities will be reclaimed and revegetated with native or other suitable vegetation, as appropriate. Construction activities in the Cantonment and training areas will cause temporary ground disturbance and result in permanent loss of small areas of native vegetation. Areas of vegetation disturbed by construction activities will be reclaimed and revegetated with native or other suitable vegetation, as appropriate.

Cultural Resources. Activities with the potential to result in adverse effects to cultural resources will be evaluated and resolved under the Section 106 effect determination and mitigation processes. The "Inadvertent Discovery of Archaeological Resources or Burials" Standard Operating Procedure (SOP) and "Native American Graves Protection and Repatriation Act" SOP will be applied and enforced.

Socioeconomics. No mitigation will be implemented because no adverse impacts to socioeconomics or environmental justice would occur.

Transportation. The Army will schedule all PCMS-related traffic movements to occur during off-peak periods on roadways operating near capacity and will stagger convoy vehicles into groups of no more than 24 vehicles each, with convoys spaced at least 15 minutes apart. The Army will schedule

roadway and rail convoy movements through the Installation Transportation Officer at least 60 days in advance of the training rotation. The Army will coordinate with state and federal officials for the potential addition of passing lanes on U.S. 160 and U.S. 350. All rail shipments will be scheduled through the Installation Transportation Officer at least 60 days in advance of the training rotation to allow adequate coordination with the rail lines. The Army will schedule construction activities so that they do not interfere with training and will use traffic-control procedures, such as detours, when appropriate.

Utilities. The Army will truck additional potable water to the PCMS if more than 5,000 personnel are present in the Cantonment and training areas, and will implement planned upgrades of water lines. The Army will arrange for septic systems to be serviced at a greater frequency and contract for additional portable toilets. The Army will install power distribution lines to provide electricity to training facilities located on the west side of the training areas and install natural gas lines, new electrical distribution, and transformer upgrades for the Cantonment to support increased demand for energy. The Army will continue to implement appropriate policies and practices in the existing Integrated Solid Waste Management Plan to address increased solid waste generation, and will use standard engineering practices to locate utilities prior to construction to avoid inadvertent utility damage.

Hazardous and Toxic Substances. The Army will prepare documentation to classify the PCMS as a Conditionally Exempt Small Quantity Generator under the Resource Conservation and Recovery Act, and will prepare and implement a Hazardous Waste Management Plan for hazardous waste potentially generated at the PCMS. The Army will continue to implement the Integrated Pest Management Plan and will develop an SPCC Plan for transporting, storing, and handling additional pesticides. Wastes will continue to be properly disposed of off the installation at a permitted hazardous waste facility. The "Ammunition Supply Point" SOP will be implemented for storage and transportation of additional ammunition and targets.

The Army will detonate all live hand grenades prior to leaving the proposed live hand grenade range. Upon range closure, the Army would remediate lead-contaminated soils if required for protection of human health and the environment. The Army will continue prescribed burning to create buffer areas in and around the small-arms, live-fire ranges, and the live hand grenade range. The Army will develop and implement an SPCC Plan to address potential adverse effects of spills or leaks of hazardous materials. Underground storage tanks and aboveground storage tanks for storage of additional petroleum products will be monitored for accidental leaks. Wastes will continue to be properly disposed of off the installation at a permitted hazardous waste facility. The Army will continue to implement the Evans Army Community Hospital Hazardous Material/Hazardous Waste Management Program and Fort Carson Management of Regulated Medical Waste to address any medical waste generated.

7.0 Decision

I have considered the results of the analysis presented in the EIS, supporting studies, and comments provided during formal comment and review periods. These factors, as well as the description of the purpose and need for the selected action, guided my decision on whether to approve the selected action.

On behalf of the Army, I have decided to implement the selected action. I have determined that implementing the selected action meets the purpose and need for achieving the Army's mission requirements consistent with the BRAC law and other transformation programs, and reflects a proper balance among initiatives for protection of the environment, appropriate mitigation, and mission accomplishment. I also took into account the fact that the No Action alternative would not meet the Army's purpose and need for the action. Other alternatives were considered and dismissed from detailed analysis because they did not meet the Army's purpose and need for the action. Furthermore, I have determined that the Army has identified and adopted all practicable means to avoid or minimize harm to the environment that could be caused by implementation of the selected action.

The decision does not include, nor does it necessitate, expansion of the PCMS through land acquisition. Expansion of the PCMS is a separate action that will be evaluated in a public process at a future date.

Craig E. College

CRAIG E. COLLEGE
Deputy Assistant Chief of Staff
for Installation Management

2 Aug 2007
Date